



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

119348

DEPT. OF TRANSPORTATION

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Memorandum

Subject: Submittal to Docket NHTSA 2000 - 7013 - 53
of Ex Parte Information Received from Mitsubishi Motors

Date: DEC 21 2000

From: Edward Jettner
Safety Standards Engineer

Reply to
Attn. of:

To: NHTSA Docket 2000 - 7013

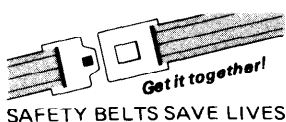
THRU: *Clarke B. Hayer Acting for RMM*
Richard M. Morgan
Acting Director, Office of Crashworthiness Standards

Frank Seales, Jr.
Frank Seales, Jr.
Chief Counsel

The attached material received from Mitsubishi Motors is hereby submitted for inclusion in
NHTSA Docket 2000-7013.

Attachment

#



December 13, 2000



RECEIVED

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To: Mr. Alope Prasad
NHTSA
Vehicle Research & Test Center
CC: Ms. Smith

MRDA-AAL

From: Bob Barlow MRDA-WDC
Tel: 1+703-525-4800 Fax: 1+703-525-6772

A handwritten signature, possibly "RB", in dark ink.

No: WF00-555 Subject: Follow up to FMVS 208 Workshop

Mr. Prasad:

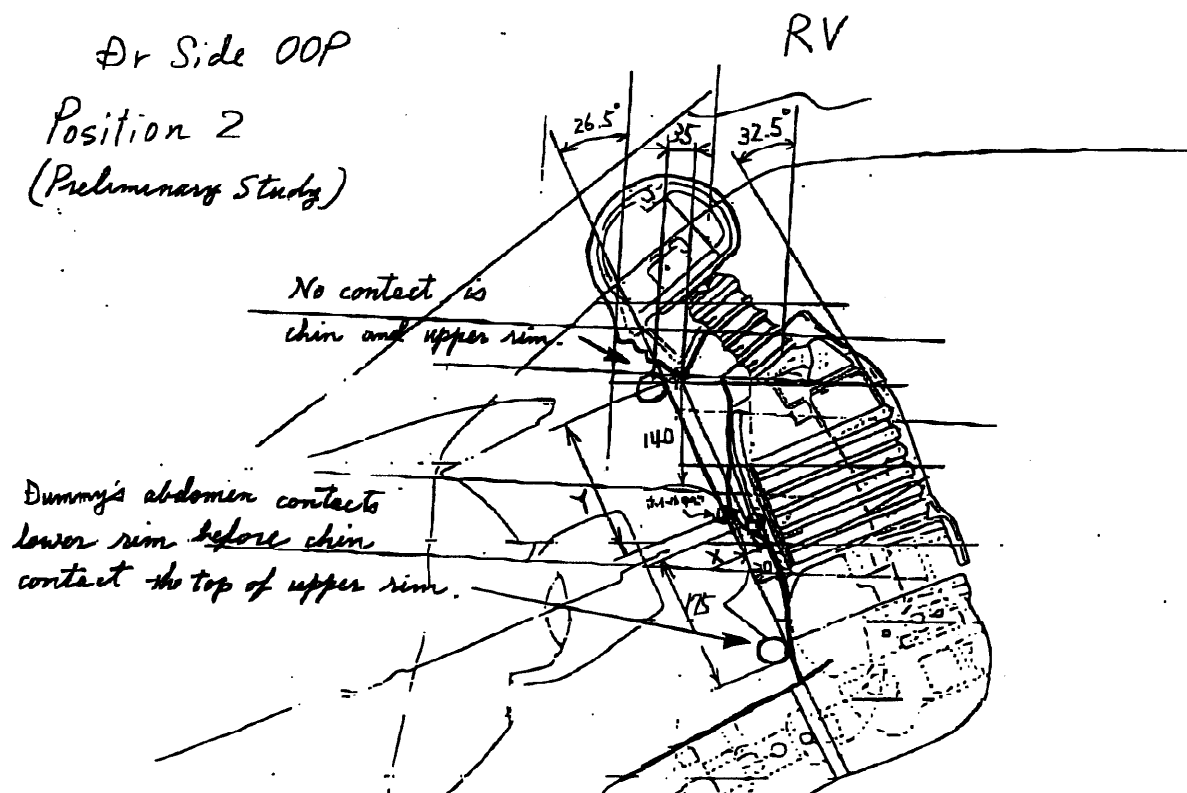
As was requested of all participants during the workshop last week, the attached material is being submitted to better explain a point Mitsubishi Motors raised (point 10) in its petition for reconsideration (copy attached) to the advanced air bag final rule. This concerns the difficulty Mitsubishi Motors has encountered in trying to position the 5% female dummy according in the procedures set forth in S26.3.7 of FMVSS 208, advanced air bags.

As the attached drawing shows, the AF5% dummy's abdomen contacts the lower portion of the steering wheel before the chin can be positioned on the upper portion of the steering wheel.

If you have any questions please feel free to call me at 703 525 4800 ex 222 or Ms. Susan Smith at 734 477 6164

Dr Side OOP

Position 2
(Preliminary Study)



**Mitsubishi Motors Petition for Reconsideration to Advanced Airbag Final Rule
Docket No. NHTSA 00-7013; Notice 1**

Mitsubishi Motors is generally supportive of the final rule on advanced air bags. It does have the following concerns which it asks NHTSA to consider as a petition for reconsideration.

1. Sections S16.2.10.1.1 & S 16.2.10.3

In S16.2.10.1.1, the seat is to be adjusted to the mid-height position. In S16.2.10.3, the seat cushion is put to the lowest position. However, if the seat cushion of the seat is the only part of the seat which is vertically adjustable, should the seat cushion be set according to S16.2.10.3 at the lowest position, or, should the seat cushion be set at the most open adjustment position as specified in S16.2.10.3? If the intent of S16.2.10.3 is for seating area, Mitsubishi Motors believes that in this instance, the seat cushion should be set at the mid position of its adjustment range.

2. Sections 16.3.2.1.3 & S16.3.3.1.3

For bucket seats, the AF5 dummy is to be seated in the center of the seat cushion. However, Mitsubishi Motors believes it is unclear in these two sections, if the dummy is to be centered strictly along the centerline through the width of the seat cushion? Or, should the dummy be positioned in this case according to the same seating procedures for the AM50% dummy? Mitsubishi Motors feels that for these sections, the seating procedures for the AM50% dummy should be used.

3. Sections S16.3.2.1.6 & S16.3.3.1.6

First, Mitsubishi Motors feels that the stated procedures in this section are too imprecise and it can foresee difficulties in the future as the final dummy position can vary from test laboratory technician to laboratory technician. As a means to better tighten up the requirements of these sections, Mitsubishi Motors suggests that the hip point should be established at a point rearward from a vertical plane at the front of the seat cushion.

Second, Mitsubishi Motors believes these procedures in these sections will create a gap between the dummy's calf and the front of the seat cushion. The resulting dummy position will not approximate a real world driving position, and the dummy will be positioned too close to the steering wheel. To remedy this situation, Mitsubishi Motors recommends that either the hip point should be established at a point rearward from a vertical plane at the front of the seat cushion, or eliminate the initial heel and thigh 90-degree angle requirement, and carry out this procedure with the legs in the extended position.

4. S16.3.2.3.3 ,S163.2.3.4, S16.3.2.3.5

Positioning for the driver's side left knee for the AM50% dummy takes into account whether there is or is not a footrest present in the vehicle. However, for the AF5% dummy the positioning procedures only takes into account a position in which there is not a footrest present. Mitsubishi Motors cannot see any rationale for a difference in this area of the test procedures, between the two test dummies, and asks that the language for the AF5% dummy be revised to include positioning procedures for the driver's left foot, when a footrest is present in a vehicle.

5. S18.2.4

In its comments to the SNPRM, Mitsubishi Motors suggested that the $\pm 20\text{mm}$ of ECE R94 or EEC 96/79 be used as the tolerance for the 40% vehicle overlap with the offset deformable barrier. Mitsubishi Motors does not understand why NHTSA choose the $\pm 50\text{mm}$ tolerance, and still believes this tolerance should be harmonized with the EU regulations.

6. S19.2.2(e)

S19.2.2(e) states, "The means for providing the required visibility may be adjustable manually or automatically, except that the telltale(s) may not be adjusted under any conditions to a level that is not visible, e.g., to the nighttime intensity during daytime driving conditions."

However, if Mitsubishi Motors' has correctly interpreted the meaning of this part of the final rule, the "e.g., to the nighttime intensity during daytime driving conditions", could be interpreted as conflicting with the requirements of FMVSS 101 S5.3.4(a) (b), if for example the telltale dims when parking lamps are switched on. Mitsubishi Motors does not believe it is NHTSA's intent to create two different telltale illumination requirements, and to avoid any misunderstanding of this requirement, asks that NHTSA amend the language in this section to reflect the language in FMVSS 101 S5.3.4(a) (b).

7. S20.2.1.3

When setting the rear-facing child restraint, Plane B passes through the geometric center of the right front outboard seat. Should the manufacturer interpret this to mean the geometric center of the seat cushion or the geometric center of the designated seating position?

Mitsubishi Motors believes NHTSA's intent is the geometric center of the designated seating position, and requests that this be made clearer in the regulatory language.

8. S20.1.2 & S20.3.2

The seat height in this section is to be set at mid position. Could NHTSA please clarify if the manufacturer is expected to adjust the seat so that the height of the *seating surface* is at the mid position?

9. S21.2 & S23.2

As the Hybrid III dummies is used in the static OOP tests, (3 year-old, 6 year-old child, & AF5%) come into direct contact with the seat, ideally the dummy should be as human like as possible; however, certain portions of these dummies (for example dummy posterior) are not suited for testing to some of the advanced air bag requirements (e.g. air bag suppression). It is Mitsubishi Motors hope that NHTSA will consider alternate test dummies, such as the OCATD dummies now under development, for inclusion into the FMVSS 208 family of test dummies.

10.S26.3.7

The position of the chin for the AF5 OOP Position-2 is set to the steering wheel rim and forward head movement is stopped only if there is contact with the windshield, but what should be done if the chest, torso, contact the steering wheel first? Mitsubishi Motors believes NHTSA should specify that dummy movement should be stopped if any part of the dummy comes into contact with the steering wheel before the chin can be positioned.